# DSHS | Welfare Fraud Investigations: Cost Savings

Diane Robbins, IT Specialist

REPORT 11.137 Prepared for DSHS Management Services Administration, Division of Fraud Investigations





# Cost Savings Estimates for TANF, GA, Child Care, Basic Food and Medical Assistance

Based on Fraud Investigations Initiated in the 2003-05 Biennium

Melissa Ford Shah, MPP, David Mancuso, PhD, Kathryn Beall, Jim Nearing, Barbara Felver, MPA

In collaboration with the Division of Fraud Investigations John Bumford, Director Robin Clawson, Deputy Director

INANCIAL SERVICES SPECIALISTS in local Community Services Offices (CSOs) of the Department of Social and Health Services (DSHS) refer cases to the Division of Fraud Investigations (DFI), Fraud Early Detection (FRED) Program when they need more information to make an eligibility determination or when they suspect fraudulent activity. Financial workers use information obtained from FRED investigations to take actions, as appropriate. Some clients voluntarily withdraw applications or request termination from benefits once their case has been referred for investigation. This report estimates the amount of state and federal funds to be saved among cases referred for welfare fraud investigation during the 2003-05 Biennium. Savings are estimated across five major program areas—Medical Assistance, the Basic Food Program, Temporary Assistance for Needy Families (TANF), Child Care, and General Assistance (GA). Estimates of cost savings are based on changes in costs for "negative action" cases in which benefits or applications were terminated, denied, reduced, or withdrawn compared to "no action" cases for which eligibility or benefits were approved or remained unchanged.

## **Key Findings**

Cases referred to DFI that subsequently had negative actions taken contributed to statistically significant cost savings across five major DSHS program areas: 1

### Total two year cost savings are estimated to be \$85.9 million for all negative action cases.

Cost savings by program are:

- Medical Assistance \$32.9m
- Basic Food Program \$21.1m
- TANF cash \$17.9m
- Child Care \$11.1m
- GA cash \$2.9m

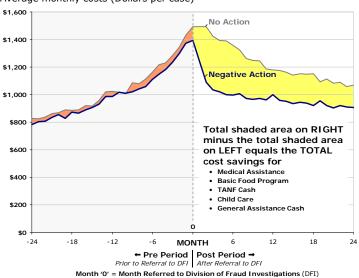
#### Total first year cost savings are estimated to be \$53.7 million for all negative action cases.

Cost savings by program are:

- Medical Assistance \$19.1m
- Basic Food Program \$13.2m
- TANF cash \$12.6m
- Child Care \$6.5m
- GA cash \$2.2m

#### **Total Costs by Case Action Taken** 2003-05 Biennium Referrals

Average monthly costs (Dollars per case)



<sup>&</sup>lt;sup>1</sup> All cost savings were found to be statistically significant with p-values <0.0001.

Department of Social and Health Services Research and Data Analysis Division Olympia, Washington

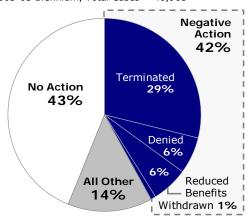
## Background

DFI FRED investigators receive requests when financial workers within local CSOs need more information about the financial and living circumstances of individuals receiving or applying for public assistance or when these applicants or recipients are suspected of committing fraud. After investigating a case, FRED investigators submit their findings to financial workers who may then take action on a case in a way that affects eligibility or the amount of benefits clients receive.

#### About the DFI Cases

DFI's current case tracking system, the Special Investigation Resource and Verification Information System (SIRVIS), shows that in the 2003-05 Biennium the division received a total of 40,903 adult case referrals from CSOs pertaining to eligibility issues or alleged welfare fraud. Upon receiving a referral, DFI conducted investigations and submitted findings to CSOs, typically in less than six weeks. These findings provided objective facts and information used to determine eligibility for program benefits. In turn, financial workers reported actions taken and withdraws to DFI. Upon receiving a report on the action taken, DFI considered a case closed.





Financial workers submitted a disposition or response to DFI indicating whether the application or case had been approved, reduced, denied, terminated, withdrawn, or had some other action taken on it. As shown here and in Table 1, approximately 42 percent of cases had actions taken that might be considered "negative" from the perspective of the client. By contrast, approximately 43 percent of cases were approved such that there was no change in program eligibility or benefits. Another 5,834 cases (14 percent) were not considered in the analysis because they had "other" actions taken. These were cases that DFI did not investigate. Once these other cases are removed, approximately 49 percent of cases included in the analysis had negative actions taken and 51 percent had no action taken.

## Number of Cases Referred to DFI in 2003-05 Biennium by FSS Action

Type of Action	FSS Eligibility Action	FSS Action Code	Number of Cases	Percent
No Action 51% of cases in analysis	Approved	APP	17,788	43%
Negative 49% of cases in analysis			17,281	42%
	Denied	DEN	2,425	6%
	Terminated	TRM	12,002	29%
	Withdrawn	WDR	490	1%
	Reduced benefits	RDU	2,364	6%
SUBTOTAL Categories included in analysis			<u>35,069</u>	86%
All Other Categories	Changed	CHG	673	2%
	Hotline FSS - info did not affect eligibility or was known	DNA	970	2%
	Hotline Manager –manager screened and determined not actionable	MGR	2,789	7%
	Other	OTH	475	1%
	Past window - investigation time elapsed	PFW	347	1%
	Case transferred to other CSO	TRN	576	1%
Missing			4	0%
SUBTOTAL Categories NOT included in analysis			<u>5,834</u>	<u>14%</u>
GRAND TOTAL			40,903	100%

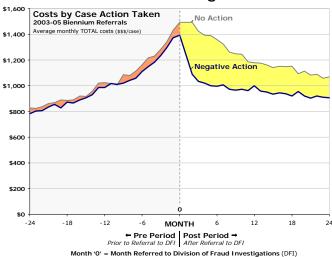
### Case Characteristics: Negative Action versus No Action

In estimating cost savings, referred cases that had negative actions taken were compared to referred cases that had no actions taken. In order to better ensure that any cost differences between the two groups could be attributed to the action taken rather than pre-existing differences, it was important to compare the two groups on a range of demographic characteristics at both the individual and assistance unit (AU) level. We also compared the two groups on the average public assistance costs they incurred by program area in the 12 and 24 month periods prior to referral. In order to get the costs between groups to be as similar as possible in the pre period, we used a statistical tool that allowed us to select cases from the no action group that were relatively similar to the negative action group (see Technical Notes for details).

## Cost Savings Detail<sup>2</sup>

Our analysis compared changes in costs for the negative action cases with those of no action cases. We conducted statistical tests to estimate the mean difference in cost changes between the two groups and to test whether this difference was significantly different from zero. We found that estimated cost savings for each of the five program areas is highly statistically significant.

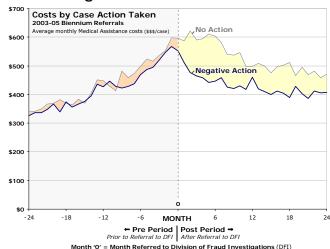
### **Total Estimated Cost Savings**



On average, the total cost savings across all five program areas one year following referral to DFI were \$3,209 per case.

- Multiplying this by the 16,731 negative action cases included in the analysis yields a total cost savings overall of \$53.7m in the first 12 months after referral to DFI.
- Similarly, the mean cost savings two years after referral were \$5,136 per case. This translates into a total estimated cost savings of \$85.9m in the first 24 months after referral.

#### Cost Savings for Medical Assistance

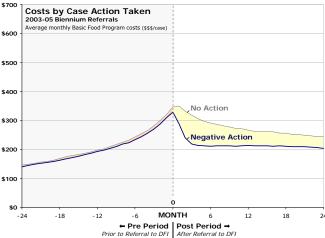


On average, the cost savings for the Medical Assistance program one year following referral to DFI was \$1,144 per case.

- Multiplying this by the 16,731 negative action cases included in the analysis yields a total cost savings for the Medical Assistance program of \$19.1m in the first 12 months after referral to DFI.
- Similarly, the mean cost savings two years after referral are \$1,969 per case. This translates into a total cost savings of \$32.9m in the first 24 months after referral.

<sup>&</sup>lt;sup>2</sup> Note that totals presented here may not add up exactly due to rounding. Calculations were done in Excel and were not rounded.

## **Cost Savings for Basic Food Program**

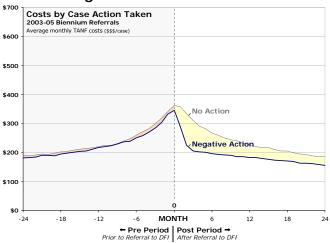


Month '0' = Month Referred to Division of Fraud Investigations (DFI)

On average, the cost savings for the Basic Food Program one year following referral to DFI were \$790 per case.

- Multiplying this by the 16,731 negative action cases included in the analysis yields a total cost savings for the Basic Food Program of \$13.2m in the first 12 months after referral to DFI.
- Similarly, the mean cost savings two years after referral are \$1,261 per case. This translates into a total cost savings of \$21.1m in the first 24 months after referral.

## Cost Savings for TANF-Cash

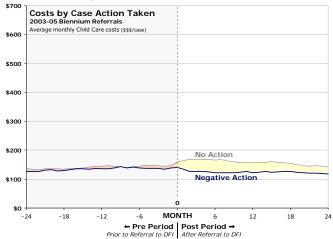


Month '0' = Month Referred to Division of Fraud Investigations (DFI)

On average, the cost savings for the TANF program one year following referral to DFI were \$755 per case.

- Multiplying this by the 16,731 negative action cases included in the analysis yields a total cost savings for the TANF program of \$12.6m in the first 12 months after referral to DFI.
- Similarly, the mean cost savings two years after referral were \$1,069 per case. This translates into a total cost savings of \$17.9m in the first 24 months after referral.

#### Cost Savings for Child Care



Month 'O' = Month Referred to Division of Fraud Investigations (DFI)

On average, the cost savings for the Child Care subsidy program one year following referral to DFI were \$387 per case.

- Multiplying this by the 16,731 negative action cases included in the analysis yields a total cost savings for the Child Care subsidy program of \$6.5m in the first 12 months after referral to DFI.
- Similarly, the mean cost savings two years after referral were \$662 per case. This translates into a total cost savings of \$11.1m in the first 24 months after referral.

THE MATH:

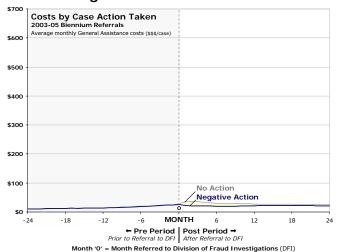
Distance between the upper and lower lines on RIGHT

Distance between the upper and lower lines on LEFT

Distance between the upper and lower lines on LEFT

See **Technical Notes** (page 6) for a detailed discussion on the Difference-in-Differences approach.

#### **Cost Savings for General Assistance-Cash**



On average, the cost savings for the GA program one year following referral to DFI were \$132 per case.

- Multiplying this by the 16,731 negative action cases included in the analysis yields a total cost savings for the GA program of \$2.2m in the first 12 months after referral to DFI.
- Similarly, the mean cost savings two years after referral were \$175 per case. This translates into a total cost savings of \$2.9m in the first 24 months after referral.

### **Discussion**

Our findings suggest that the services DFI FRED investigators provide to financial workers are valuable to DSHS, reducing payments to individuals who may have knowingly provided inaccurate information about their income, assets, employment or housing status. In turn, more resources are available to help those who qualify for public assistance.

Yet while the estimates of cost savings are both large and statistically significant, caution should be used in attributing all of the savings to fraud investigations per se. In some cases, financial workers may have taken negative action on a case before receiving information back from DFI as to whether or not fraud allegations were substantiated. They might also take negative actions in cases where the allegations were not recorded by DFI as substantiated. Indeed, preliminary analyses suggest that while there is a strong correlation between the DFI recommendations and financial worker actions, the two do not always correspond in the way one would expect. There are likely a variety of reasons for this. For example, financial workers may be pressed to make decisions about certain cases before they have received the investigative findings from the DFI investigator. Financial workers are also likely to take other factors into account in determining eligibility.

#### **TECHNICAL NOTES**

## Case Selection and Unit of Analysis

The Division of Fraud Investigations (DFI) provided RDA with data from SIRVIS on all cases referred by local Community Services Offices (CSOs) during fiscal years 2004 and 2005. Three cases were excluded because they were determined to be children (two were foster children and one was a child under legal guardianship). DFI data was then linked to personal identifiers in the Automated Client Eligibility System (ACES) and Social Service Payment System (SSPS) in order to identify all individuals associated with a case in the referral month. That individual-level data was then linked to data on service utilization, cost, and demographic characteristics in the Client Services Database (CSDB) and the Client Outcomes Database (CODB). In linking the data, 843 DFI cases were excluded because none of their identifying information could be linked to data on public assistance, leaving 40,060 cases in the linked file. The individual-level data was then rolled up to the DFI case-level so that savings could be estimated based on the number of cases that had negative actions.

#### **Time Frame for Analysis**

For each DFI case included in the study, the "index month" was defined as the month in which the case was referred in FY 2004 or 2005. Data were linked for fiscal years 2002 to 2007, allowing us to construct a pre- and post-referral period. The pre period is the 24 months prior to the referral date and the post period is the 24 months following the referral date.

#### **Constructing the Comparison Group**

In order to estimate the cost savings from identifying and taking action upon welfare fraud, it is important to consider what the costs to DSHS would have been in the absence of intervention. In this case, the best available means of approximating these costs was to examine the costs of public assistance for individuals whose cases were referred to DFI but did not have negative actions taken. Cases in this group were found to be very similar to negative action cases at the referral date on demographic characteristics such as racial/ethnic composition of the AU, average number of children and adults in the AU, and average number of children of various ages. This suggests financial workers are likely not taking differential actions depending on the demographic characteristics of a given case.

Yet because pre-period public assistance costs differed between the two groups, propensity score-based sampling was employed to filter out cases in the comparison group that were not as similar to negative action cases with respect to pre-period costs. Cases were also filtered out if they had "other" actions taken that could be categorized as neither negative actions nor no actions. These "other" action cases had been closed without receiving a DFI investigation. Filtering resulted in the loss of 4,968 cases from the comparison group (from n=17,645 to n=12,677). This group was compared to 16,731 cases with negative actions.

#### Difference-in-Differences (D-in-D) Approach

In order to accurately estimate cost savings, it was necessary to first control for any time-invariant, unobservable characteristics over the 5 year study period that might lead different cases to receive different levels of benefits. These "fixed effects" in costs might relate to things such as chronic illness, young children, or barriers to work such as domestic violence, lack of access to transportation, or severe depression. They might also include personal traits such as level of motivation and attitudes towards work or public assistance.

A difference-in-differences approach allowed us to control for such fixed effects by calculating average costs as the costs in the post-period minus costs in the pre-period for both the negative action and no action group. We then compared the difference in average costs between these groups. Below is the general form of the equations used to generate D-in-D average costs:

Average 1 Year D-in-D Costs = (Average Costs<sub>1 year after referral</sub>) - (Average Costs<sub>1 year before referral</sub>)

Average 2 Year D-in-D Costs = (Average Costs<sub>1 year after referral</sub> + Average Costs<sub>2 years after referral</sub>) 
(Average Costs<sub>1 year before referral</sub> + Average Costs<sub>2 years before referral</sub>)

Additional copies of this paper may be obtained from:
DSHS Research and Data Analysis Division
PO Box 45204, Olympia, WA 95204-5204
360.902.0701

http://www1.dshs.wa.gov/RDA/



APPENDIX: REPORT 11.137

## Cost Savings Estimates for TANF, GA, Child Care, Basic Food and Medical Assistance

#### MONTHLY REPORTING TOOL

Developed for program use by

Melissa Ford Shah, MPP, David Mancuso, PhD, Kathryn Beall, Jim Nearing, Barbara Felver, MES, MPA DSHS Planning, Performance and Accountability Administration, Research and Data Analysis Division

In collaboration with the Division of Fraud Investigations

John Bumford, Director
Robin Clawson, Deputy Director
Diane Robbins, IT Specialist

#### REPORTING TOOL | Cost Savings per Case by Type of Case

This appendix shows estimates of cost savings per case by type of case, providing a tool that will allow DFI to easily estimate cost savings on a monthly basis. Rather than getting the best estimate of *overall* savings by program area as done in the main body of the report, this appendix provides cost savings parameters at a finer level of detail by case type so that DFI can track cost savings from welfare fraud investigations on an ongoing basis.

In order to provide the most meaningful parameters for monthly reporting, it was necessary to remove cases in which the program code used at the point of referral to DFI was outdated or reflected participation in a program for which DFI does not focus its investigative resources. This resulted in the exclusion of 1,283 cases that were included in the main analysis, where the goal was to estimate overall cost savings. The 11 program codes that remained were organized into the five benefit program areas included above in the report (TANF, Basic Food Program, Medical Assistance, GA, and Child Care). Cases were assigned to the one program area indicated on the original referral form that the financial worker sent to DFI. As a result, respondents were placed into only one case type for the purposes of providing case-level estimates. However, cost savings estimates still reflect savings across all five benefit categories. For example, if a case was referred to DFI because the financial worker suspected that the client was providing inaccurate information with respect to TANF eligibility, that client would be placed in the TANF case type. Nevertheless, if that individual or members of his or her assistance unit also received Medicaid, child care subsidies, and Basic Food Program assistance, these costs (and potentially savings) were also included.

In a similar vein, in developing a monthly reporting tool it was important to provide a finer level of detail in terms of type of negative action taken on a case. Whereas the main analysis compares cost savings for no action to cost savings for negative action cases, the appendix compares no action cases to each of the four negative action case categories (denied, terminated, reduced and withdrawn). This approach ensures that the estimates remain accurate even if the mix of cases with different types of negative actions changes over time (for example, if there is an increasing proportion of negative action cases that are terminated rather than reduced over time).

<sup>&</sup>lt;sup>3</sup> Excluded program codes include: D-CW Services or Foster Care, EA-Emergency Assistance, GW-ADATSA Medical—Drug/Alcohol Inpatient Treatment, GS-GA for pregnant women, M-Detox or limited casualty program—medically indigent, P-Permanently and totally disabled (SSI/SSA), R-Refugee Assistance, FF-Refugee Assistance—Financial and Medical, S-Continuing GA for pregnant women, T-Over 65 yrs in psychiatric facility, W-ADATSA— Alcohol Treatment Centers, and X-Presumptive SSI.

# REPORTING TOOL $\mid$ 24 Month Estimated Cost Savings per Case

Case Type	FSS Action Type	24 Month Savings per Case
TANF Program Codes C, E, DA		
	Denied	4,007
	Terminated	6,413
	Reduced	4,574
	Withdrawn	1,345
Basic Food Program Program Cod	des F, FS	
	Denied	3,120
	Terminated	4,335
	Reduced	3,196
	Withdrawn	3,477
Medical Assistance Program Cod	es MA, H, NF	
	Denied	561
	Terminated	7,936
	Reduced	-25
	Withdrawn	178
GA Program Codes GA, U		
	Denied	4,440
	Terminated	8,361
	Reduced	4,154
	Withdrawn	2,870
Child Care Program Code CC		
	Denied	5,403
	Terminated	7,814
	Reduced	6,580
	Withdrawn	452

Additional copies of this paper may be obtained from: DSHS Research and Data Analysis Division PO Box 45204, Olympia, WA 95204-5204 360.902.0701

http://www1.dshs.wa.gov/RDA/

